|   |                   | DEPARTMENT (                                | ATE OF UTAH<br>OF NATURAL RES<br>FOIL, GAS AND I |   |        |  | FO<br>AMENDED REPO             | RM 3<br>RT   |  |  |  |  |
|---|-------------------|---|--|---|--------|--|--------------------------------|--------------|--|--|--|--|
| APPLI   | CATION FOR P      | PERMIT TO DRILL                             |  |   |        | 1. WELL NAME and<br>Greater                  | NUMBER Monument Butte R-2      | 23-8-17      |  |  |  |  |
| 2. TYPE OF WORK  DRILL NEW WELL (iii)   | REENTER P&A       | WELL DEEPEN                                 | N WELL   |   |        | 3. FIELD OR WILD                             | CAT<br>MONUMENT BUTTE          |              |  |  |  |  |
| 4. TYPE OF WELL Oil We  | ell Coalbec       | i Methane Well: NO                          |  |   |        | 5. UNIT or COMMU                             | INITIZATION AGR<br>GMBU (GRRV) | EEMENT NAME  |  |  |  |  |
| 6. NAME OF OPERATOR   | WFIELD PRODUCT    |   |  |   |        | 7. OPERATOR PHONE<br>435 646-4825            |                                |              |  |  |  |  |
| 8. ADDRESS OF OPERATOR  |                   |   |  |   |        | 9. OPERATOR E-M                              |                                |              |  |  |  |  |
| 10. MINERAL LEASE NUMBER  | t 3 Box 3630 , My | 11. MINERAL OWNER                           | RSHIP  |   | _      | 12. SURFACE OWN                              |                                |              |  |  |  |  |
| (FEDERAL, INDIAN, OR STATE) UTU-76239   |                   | FEDERAL ( INDI                              | IAN STATE (                                      | FEE (   | 9      |  | IDIAN STATE                    |              |  |  |  |  |
| 13. NAME OF SURFACE OWNER (if box 12  |                   |   |  |   |        | 14. SURFACE OWN                              | •                              | •            |  |  |  |  |
| 15. ADDRESS OF SURFACE OWNER (if box  | ( 12 = 'fee')     |   |  |   |        | 16. SURFACE OWN                              | IER E-MAIL (if box             | 12 = 'fee')  |  |  |  |  |
| 17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')  |                   | 18. INTEND TO COMI<br>MULTIPLE FORMATION    |  | TION FROM   | 1      | 19. SLANT                                    |                                |              |  |  |  |  |
| ,   |                   | YES (Submit Co                              | ommingling Applicat                              | ion) NO (   |        | VERTICAL DI                                  | RECTIONAL 📵 🛚 I                | HORIZONTAL 🗍 |  |  |  |  |
| 20. LOCATION OF WELL  | FOO               | TAGES                                       | QTR-QTR  | SECTI   | ION    | TOWNSHIP                                     | RANGE                          | MERIDIAN     |  |  |  |  |
| LOCATION AT SURFACE   | 1975 FSL          | . 1991 FWL                                  | NESW   | 23  |        | 8.0 S  | 17.0 E                         | S            |  |  |  |  |
| Top of Uppermost Producing Zone   | 1475 FSL          | . 2488 FWL                                  | NESW   | 23  |        | 8.0 S  | 17.0 E                         | S            |  |  |  |  |
| At Total Depth  | 1164 FSL          | _ 2506 FEL                                  | SWSE   | 23  |        | 8.0 S  | 17.0 E                         | S            |  |  |  |  |
| 21. COUNTY  DUCHESNE  |                   | 22. DISTANCE TO NE                          | AREST LEASE LIN                                  | IE (Feet)   |        | 23. NUMBER OF A                              | CRES IN DRILLING               | UNIT         |  |  |  |  |
|   |                   | 25. DISTANCE TO NE<br>(Applied For Drilling |  | AME POOL  | -      | <b>26. PROPOSED DEPTH</b> MD: 6707 TVD: 6707 |                                |              |  |  |  |  |
| 27. ELEVATION - GROUND LEVEL  |                   | 28. BOND NUMBER                             |  | 29. SOURCE OF DRILLING WATER /<br>WATER RIGHTS APPROVAL NUMBER IF API |        |  |                                |              |  |  |  |  |
| 5129  |                   |   | WYB000493  |   |        |  |                                |              |  |  |  |  |
|   |                   | AT  | TACHMENTS  |   |        |  |                                |              |  |  |  |  |
| VERIFY THE FOLLOWING  | ARE ATTACHE       | D IN ACCORDANC                              | CE WITH THE U                                    | TAH OIL   | AND G  | GAS CONSERVAT                                | ION GENERAL R                  | ULES         |  |  |  |  |
| WELL PLAT OR MAP PREPARED BY  | LICENSED SURV     | EYOR OR ENGINEER                            | COM  | IPLETE DRI  | ILLING | PLAN   |                                |              |  |  |  |  |
| AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE) FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER |                   |   |  |   |        |  | t                              |              |  |  |  |  |
| DRILLED)  DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL MAP                             |                   |   |  |   |        |  |                                |              |  |  |  |  |
| NAME Mandie Crozier   |                   | TITLE Regulatory Te                         | ech  | ch <b>PHONE</b> 435 646-4825  |        |  |                                |              |  |  |  |  |
| SIGNATURE   |                   | <b>DATE</b> 12/08/2010                      | 0 EMAIL mcrozier@newfield.com                    |   |        |  |                                |              |  |  |  |  |
| API NUMBER ASSIGNED<br>43013505290000   |                   | APPROVAL                                    |  |   | B      | acylll                                       |                                |              |  |  |  |  |
|   |                   | Permit Manager                              |  |   |        |  |                                |              |  |  |  |  |

API Well No: 43013505290000 Received: 12/8/2010

|        | Proposed Hole, Casing, and Cement |             |          |             |  |  |  |  |  |  |  |  |
|--------|-----------------------------------|-------------|----------|-------------|--|--|--|--|--|--|--|--|
| String | Hole Size                         | Casing Size | Top (MD) | Bottom (MD) |  |  |  |  |  |  |  |  |
| Prod   | 7.875                             | 5.5         | 0        | 6707        |  |  |  |  |  |  |  |  |
| Pipe   | Grade                             | Length      | Weight   |             |  |  |  |  |  |  |  |  |
|        | Grade J-55 LT&C                   | 6707        | 15.5     |             |  |  |  |  |  |  |  |  |
|        |                                   |             |          |             |  |  |  |  |  |  |  |  |

API Well No: 43013505290000 Received: 12/8/2010

|        | Proposed Hole, Casing, and Cement |             |          |             |  |  |  |  |  |  |  |  |
|--------|-----------------------------------|-------------|----------|-------------|--|--|--|--|--|--|--|--|
| String | Hole Size                         | Casing Size | Top (MD) | Bottom (MD) |  |  |  |  |  |  |  |  |
| Surf   | 12.25                             | 8.625       | 0        | 300         |  |  |  |  |  |  |  |  |
| Pipe   | Grade                             | Length      | Weight   |             |  |  |  |  |  |  |  |  |
|        | Grade J-55 ST&C                   | 300         | 24.0     |             |  |  |  |  |  |  |  |  |
|        |                                   |             |          |             |  |  |  |  |  |  |  |  |

## NEWFIELD PRODUCTION COMPANY GREATER MONUMENT BUTTE R-23-8-17 AT SURFACE: NE/SW SECTION 23, T8S, R17E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. GEOLOGIC SURFACE FORMATION:

Uinta formation of Upper Eocene Age

## 2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

| Uinta       | 0, - | 1870  |
|-------------|------|-------|
| Green River |      | 1870' |
| Wasatch     |      | 6560' |
| Proposed TD |      | 6707' |

#### 3. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:

Green River Formation (Oil) 1870' – 6560'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval

Flow Rate

Hardness

Water Classification (State of Utah)

Dissolved Iron (Fe) (ug/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Sodium (Na) (mg/l)

 $\begin{array}{ll} \mbox{Dissolved Magnesium (Mg) (mg/l)} & \mbox{Dissolved Carbonate (CO}_3) \ (mg/l) \\ \mbox{Dissolved Bicarbonate (NaHCO}_3) \ (mg/l) & \mbox{Dissolved Chloride (Cl) (mg/l)} \\ \mbox{Dissolved Sulfate (SO}_4) \ (mg/l) & \mbox{Dissolved Total Solids (TDS) (mg/l)} \\ \end{array}$ 

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: Greater Monument Butte R-23-8-17

| Size           | Interval |        | Weight  | Grade | Coupling | Design Factors |          |         |  |
|----------------|----------|--------|---------|-------|----------|----------------|----------|---------|--|
| Size           | Тор      | Bottom | vveigni | Grade | Coupling | Burst          | Collapse | Tension |  |
| Surface casing | 0"       | 300'   | 24.0    | J-55  | STC      | 2,950          | 1,370    | 244,000 |  |
| 8-5/8"         | 0        | 300    | 24.0    | J-55  | SIC      | 17.53          | 14.35    | 33.89   |  |
| Prod casing    | 0        | 0.7071 | 45.5    | 1.55  | 1.70     | 4,810          | 4,040    | 217,000 |  |
| 5-1/2"         | 0'       | 6,707' | 15.5    | J-55  | LTC      | 2.25           | 1.89     | 2.09    |  |

## Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: Greater Monument Butte R-23-8-17

| Job            | Fill                                  | Description                  | Sacks           | ОН      | Weight | Yield    |  |
|----------------|---------------------------------------|------------------------------|-----------------|---------|--------|----------|--|
| 300            | No.                                   | Description                  | ft <sup>3</sup> | Excess* | (ppg)  | (ft³/sk) |  |
| Surface casing | 300'                                  | Class G w/ 2% CaCl           | 138             | 30%     | 15.8   | 1.17     |  |
| Surface casing | 300                                   | Class G W/ 276 CaCl          | 161             | 30 /6   | 15.6   | [+17     |  |
| Prod casing    | 4,707'                                | Prem Lite II w/ 10% gel + 3% | 325             | 30%     | 11.0   | 3.26     |  |
| Lead           | 4,707                                 | KCI                          | 1060            | 30 /6   | 11.0   | 3.20     |  |
| Prod casing    | casing 2,000' 50/50 Poz w/ 2% gel + 3 |                              | 363             | 30%     | 14.3   | 1.24     |  |
| Tail           | 2,000                                 | KCI                          | 451             | 3070    | 14.5   | 1,24     |  |

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to Exhibit C for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will visually monitor pit levels and flow from the well during drilling operations.

#### 7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

## 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

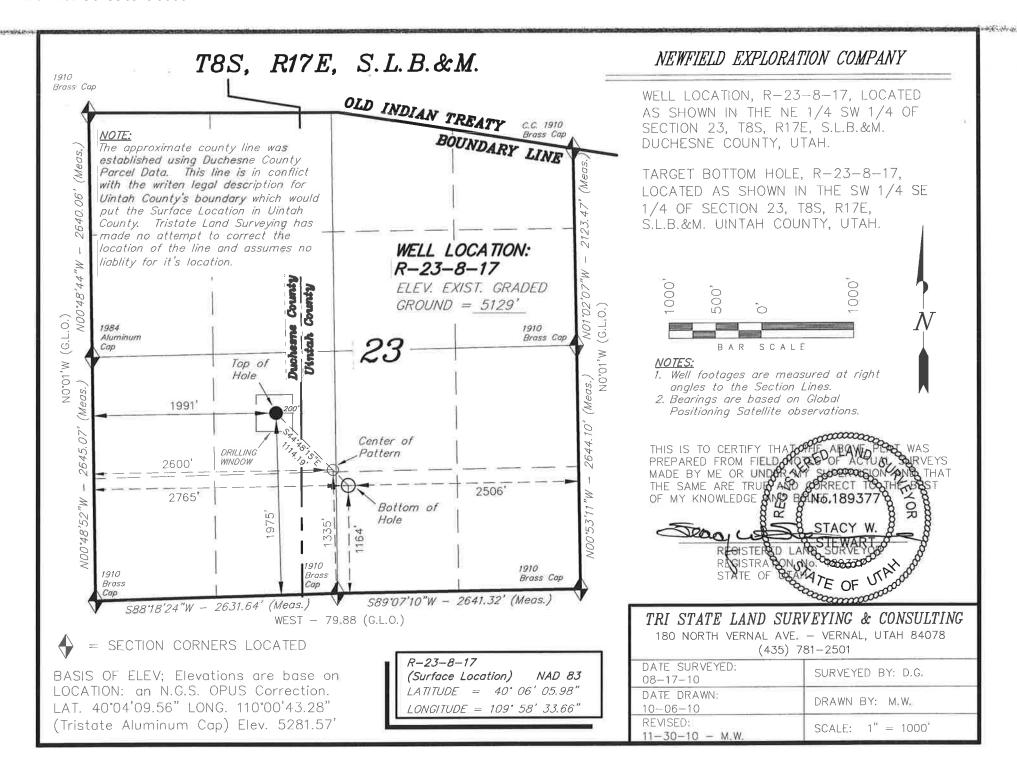
The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

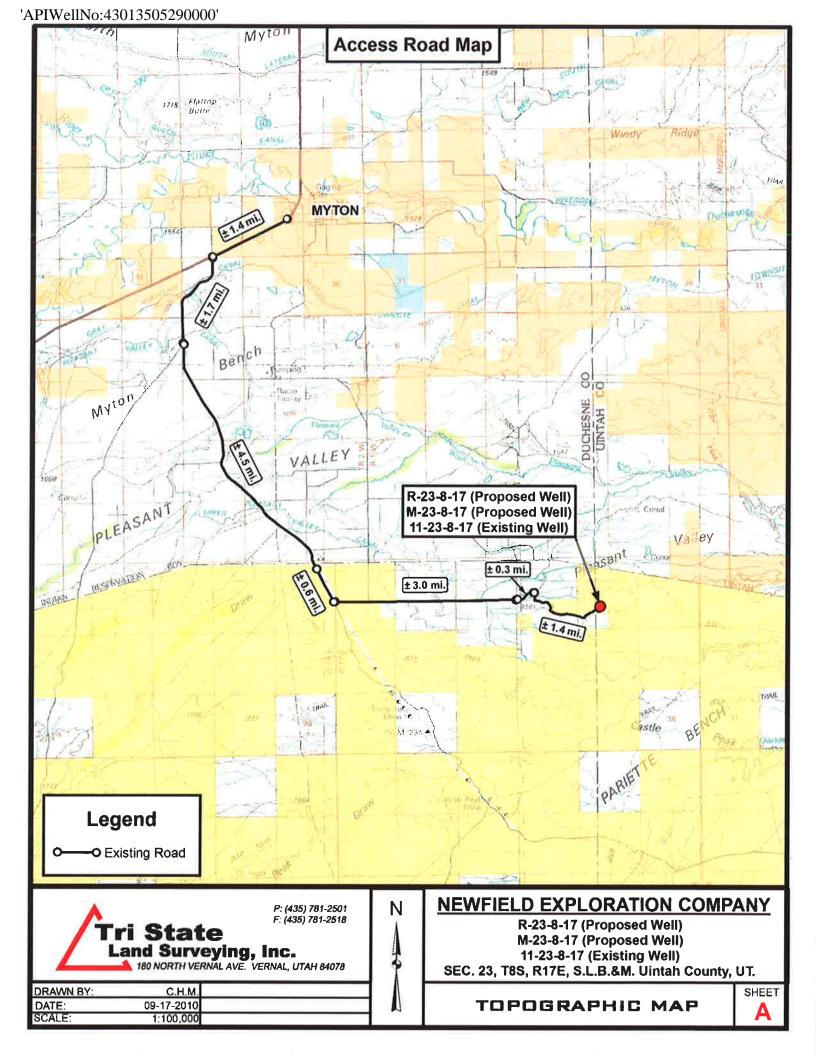
#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

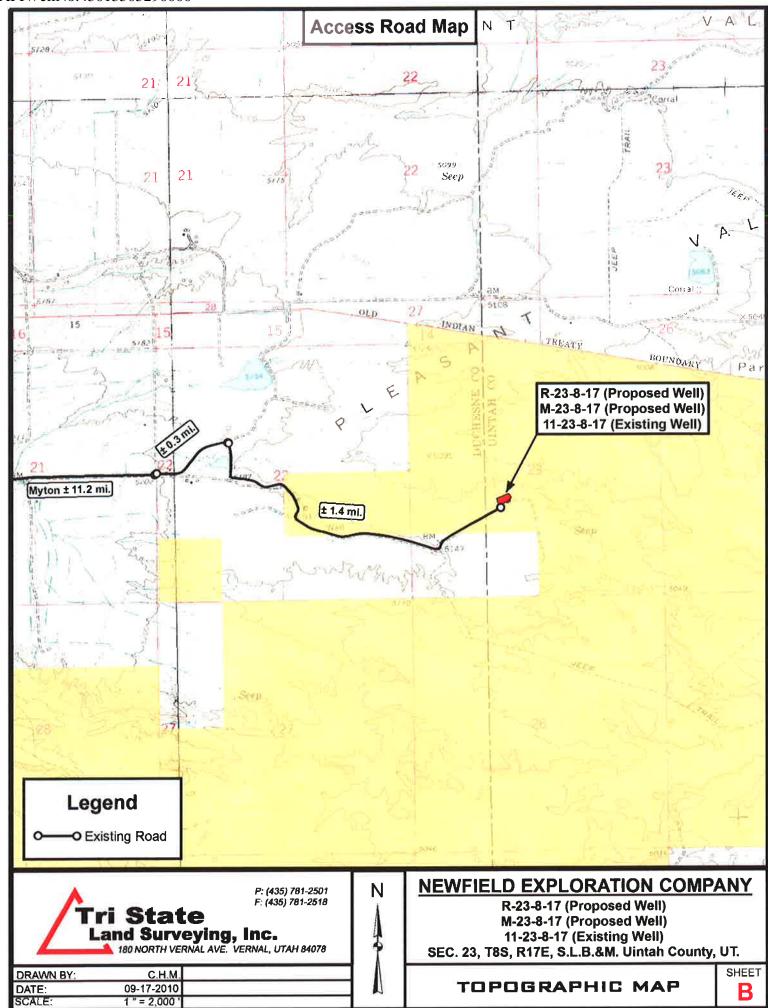
## 10. ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:

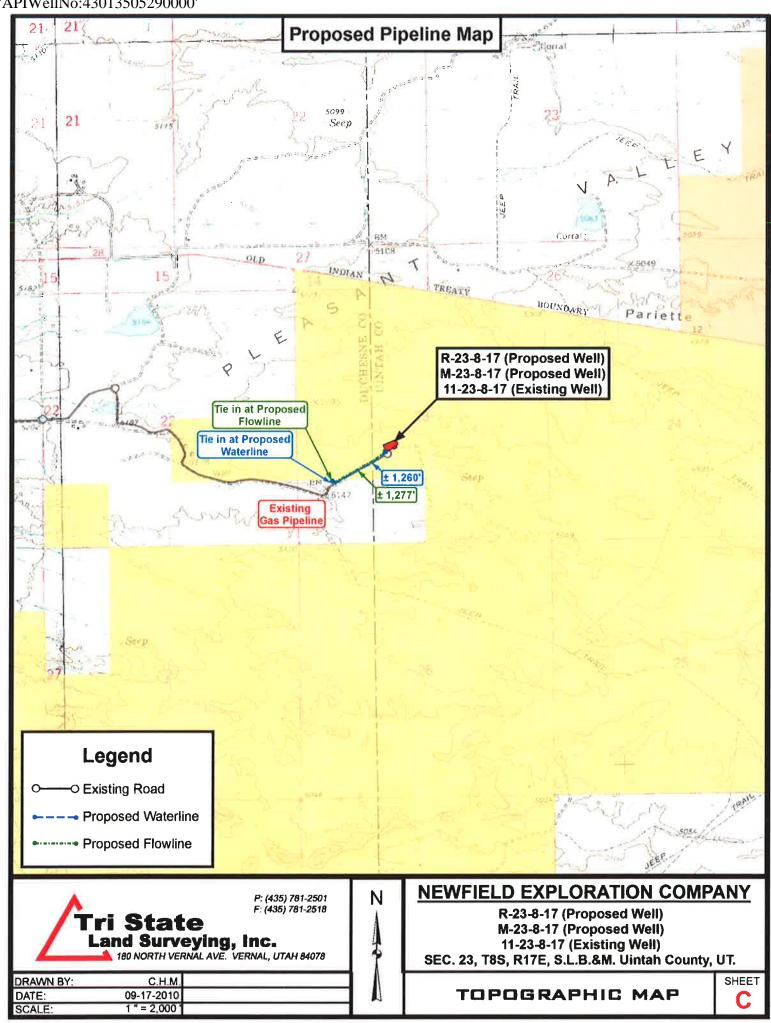
It is anticipated that the drilling operations will commence the first quarter of 2011, and take approximately seven (7) days from spud to rig release.



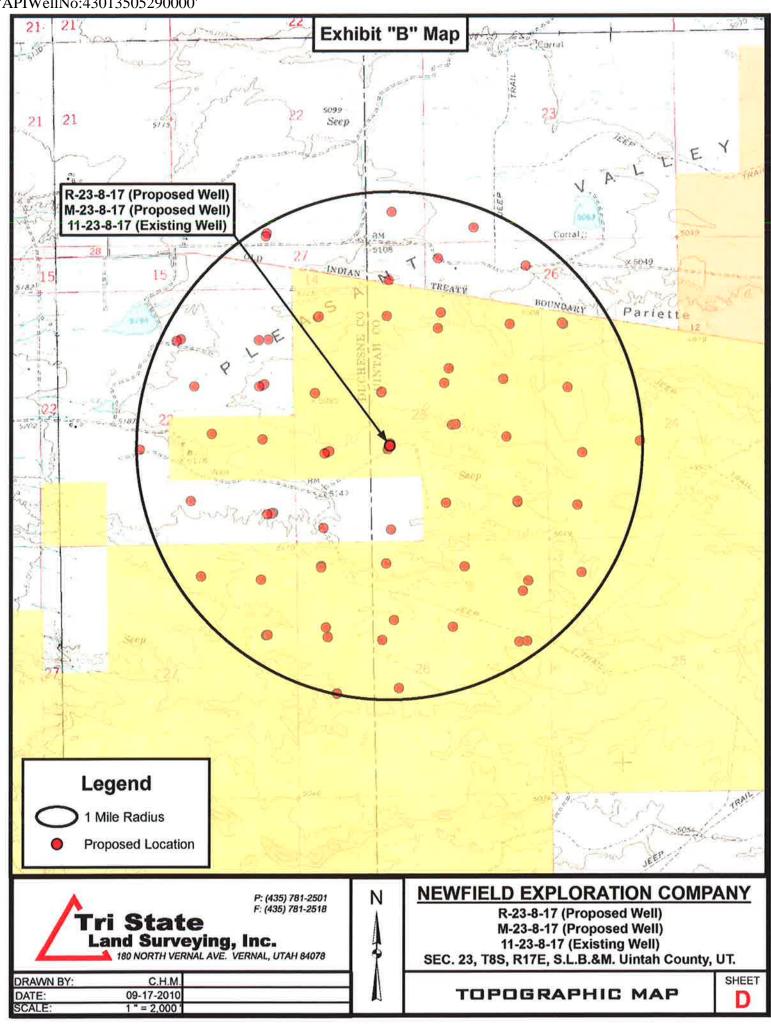


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| The transfer of the second sec | 1           |          | .8                                   |   |                  | / ×                                   | # T   | 43 45 45 45                      | 15                                      | 1 1 11                                  | 4754                                  | 4 n4 4                                    |      |           | 节         |
| The state of the s | ~           | :=:      |                                      | **                                      |                  | R Z                                   | N CO  | 22 4 1 4 2 4                     | # 134 Y                                 | न अर्थ                                  | 40 4                                  | 2 · ·                                     | R    |           | T.        |
|  |             | 9        | , Ē                                  | E                                       | a                | 2                                     |   |                                  | F 25 25 %                               | 4334                                    | नभड़ न्हें                            | 9 9 4                                     |      | -         | # <u></u> |
|  | +           |          |                                      | -                                       |                  | -                                     |   |                                  |   | -                                       | 757                                   |   | ×    | -00       | 5         |





# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 23 T8S, R17E R-23-8-17

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

05 October, 2010





## PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site:

Wellbore:

Design:

Well:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) **SECTION 23 T8S, R17E** 

R-23-8-17 Wellbore #1 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well R-23-8-17

R-23-8-17 @ 5141.0ft (Original Well Elev) R-23-8-17 @ 5141.0ft (Original Well Elev)

Minimum Curvature

Project USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

US State Plane 1983

North American Datum 1983

System Datum:

Mean Sea Level

Map Zone:

Utah Central Zone

SECTION 23 T8S, R17E Site

+N/-S

+E/-W

Site Position: From: Мар

Easting: 0.0 ft

7,207,900.00 ft 2,064,500.00ft

Latitude: Longitude: 40° 5' 51.665 N

**Position Uncertainty:** 

Slot Radius:

**Grid Convergence:** 

109° 59' 2.132 W 0.97°

R-23-8-17, SHL: LAT: 40° 06' 05.98, LONG: -109° 58' 33.66 Well

**Well Position** 

1,448.3 ft 2,212.4 ft

Northing: Easting:

Northing:

7,209,385.82 ft 2,066,687.42 ft Latitude: Longitude:

40° 6' 5.980 N 109° 58' 33.660 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,141.0 ft

**Ground Level:** 

5,129.0 ft

Wellbore Wellbore #1 Declination Dip Angle Field Strength Magnetics **Model Name** Sample Date (°) (°) (nT) **IGRF2010** 2010/10/05 11.38 65.88 52,385

Design

Design #1

**Audit Notes:** 

Version:

Phase:

**PROTOTYPE** 

Tie On Depth:

0.0

**Vertical Section:** 

Depth From (TVD) (ft)

5,400.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 135.20

| lan Section               | s                  |                |                           |               |               |                             |                            |                           |            |               |
|---------------------------|--------------------|----------------|---------------------------|---------------|---------------|-----------------------------|----------------------------|---------------------------|------------|---------------|
| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth<br>(°) | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) | TFO<br>(°) | Target        |
| 0.0                       | 0.00               | 0.00           | 0.0                       | 0.0           | 0.0           | 0.00                        | 0.00                       | 0.00                      | 0.00       |               |
| 600.0                     | 0.00               | 0.00           | 600.0                     | 0.0           | 0.0           | 0.00                        | 0.00                       | 0.00                      | 0.00       |               |
| 1,346.9                   | 11.20              | 135.20         | 1,342.1                   | -51.7         | 51.3          | 1.50                        | 1.50                       | 0.00                      | 135.20     |               |
| 5,483.6                   | 11.20              | 135.20         | 5,400.0                   | -622.0        | 617.6         | 0.00                        | 0.00                       | 0.00                      | 0.00       | R-23-8-17 TGT |
| 6,706.9                   | 11.20              | 135.20         | 6,600.0                   | -790.6        | 785.1         | 0.00                        | 0.00                       | 0.00                      | 0.00       |               |



# PayZone Directional Services, LLC.

**Planning Report** 



Database: Company: Project: Site: EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT) SECTION 23 T8S, R17E

Well: R-23-8-17
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well R-23-8-17

R-23-8-17 @ 5141.0ft (Original Well Elev) R-23-8-17 @ 5141.0ft (Original Well Elev)

True

Minimum Curvature

| nned Survey               |                    |         |                           |                  |               |                             |                             |                            |                           |
|---------------------------|--------------------|---------|---------------------------|------------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft)    | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
| 0.0                       | 0.00               | 0.00    | 0.0                       | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 100.0                     | 0.00               | 0.00    | 100.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 200.0                     | 0.00               | 0.00    | 200.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 300.0                     | 0.00               | 0.00    | 300.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 400.0                     | 0.00               | 0.00    | 400.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
|                           |                    |         |                           |                  |               |                             |                             |                            |                           |
| 500.0                     | 0.00               | 0.00    | 500.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 600.0                     | 0.00               | 0.00    | 600.0                     | 0.0              | 0.0           | 0.0                         | 0.00                        | 0.00                       | 0.00                      |
| 700.0                     | 1.50               | 135.20  | 700.0                     | -0.9             | 0.9           | 1.3                         | 1.50                        | 1.50                       | 0.00                      |
| 800.0                     | 3.00               | 135.20  | 799.9                     | -3.7             | 3.7           | 5.2                         | 1.50                        | 1.50                       | 0.00                      |
| 900.0                     | 4.50               | 135.20  | 899.7                     | -8.4             | 8:3           | 11.8                        | 1.50                        | 1.50                       | 0.00                      |
| 1,000.0                   | 6.00               | 125.00  | 999.3                     | 44.0             |               |                             |                             |                            |                           |
|                           |                    | 135.20  |                           | -14.8            | 14.7          | 20.9                        | 1.50                        | 1.50                       | 0.00                      |
| 1,100.0                   | 7.50               | 135.20  | 1,098.6                   | -23.2            | 23.0          | 32.7                        | 1.50                        | 1,50                       | 0.00                      |
| 1,200.0                   | 9.00               | 135.20  | 1,197.5                   | -33.4            | 33.1          | 47.0                        | 1.50                        | 1.50                       | 0.00                      |
| 1,300.0                   | 10.50              | 135.20  | 1,296.1                   | -45.4            | 45.1          | 64.0                        | 1.50                        | 1.50                       | 0.00                      |
| 1,346.9                   | 11.20              | 135.20  | 1,342.1                   | -51.7            | 51.3          | 72.8                        | 1.50                        | 1.50                       | 0.00                      |
| 1,400.0                   | 11.20              | 135.20  | 1,394.2                   | -59.0            | 58.6          | 83.1                        | 0.00                        | 0.00                       | 0.00                      |
| 1,500.0                   | 11.20              | 135.20  | 1,492.3                   | -72.8            | 72.3          | 102.5                       | 0.00                        | 0.00                       |                           |
| 1,600.0                   | 11.20              | 135.20  |                           |                  |               |                             |                             |                            | 0.00                      |
|                           |                    |         | 1,590.4                   | -86.5            | 85.9          | 122.0                       | 0.00                        | 0.00                       | 0.00                      |
| 1,700.0                   | 11.20              | 135.20  | 1,688.5                   | -100.3           | 99.6          | 141.4                       | 0.00                        | 0.00                       | 0.00                      |
| 1,800.0                   | 11.20              | 135.20  | 1,786.6                   | -114.1           | 113.3         | 160.8                       | 0.00                        | 0.00                       | 0.00                      |
| 1,900.0                   | 11.20              | 135.20  | 1,884.7                   | -127.9           | 127.0         | 180.3                       | 0.00                        | 0.00                       | 0.00                      |
| 2,000.0                   | 11.20              | 135.20  | 1,982.8                   | -141.7           | 140.7         | 199.7                       | 0.00                        | 0.00                       | 0.00                      |
| 2,100.0                   | 11.20              | 135.20  | 2,080.9                   | -155.5           | 154.4         | 219.1                       | 0.00                        | 0.00                       | 0.00                      |
| 2,200.0                   | 11.20              | 135.20  | 2,179.0                   | -169.3           | 168.1         | 238.5                       |                             | 0.00                       |                           |
| 2,300.0                   | 11.20              |         |                           |                  |               |                             | 0.00                        |                            | 0.00                      |
| 2,300,0                   | 11.20              | 135.20  | 2,277.1                   | -183.0           | 181.8         | 258.0                       | 0.00                        | 0.00                       | 0.00                      |
| 2,400.0                   | 11.20              | 135.20  | 2,375.2                   | -196.8           | 195.5         | 277.4                       | 0.00                        | 0.00                       | 0.00                      |
| 2,500.0                   | 11.20              | 135.20  | 2,473.3                   | -210.6           | 209.2         | 296.8                       | 0.00                        | 0.00                       | 0.00                      |
| 2,600.0                   | 11.20              | 135.20  | 2,571.4                   | -224.4           | 222.8         | 316.3                       | 0.00                        | 0.00                       | 0.00                      |
| 2,700.0                   | 11.20              | 135.20  | 2,669.5                   | -238.2           | 236.5         | 335.7                       | 0.00                        | 0.00                       | 0.00                      |
| 2,800.0                   | 11.20              | 135.20  | 2,767.6                   | -252.0           | 250.2         | 355.1                       | 0.00                        | 0.00                       | 0.00                      |
|                           |                    |         |                           |                  | 230,2         | 555.1                       | 0.00                        | 0.00                       | 0.00                      |
| 2,900.0                   | 11.20              | 135.20  | 2,865.7                   | -265.8           | 263.9         | 374.5                       | 0.00                        | 0.00                       | 0.00                      |
| 3,000.0                   | 11.20              | 135.20  | 2,963.7                   | -279.6           | 277.6         | 394.0                       | 0.00                        | 0.00                       | 0.00                      |
| 3,100.0                   | 11.20              | 135.20  | 3,061.8                   | -293.3           | 291.3         | 413.4                       | 0.00                        | 0.00                       | 0.00                      |
| 3,200.0                   | 11.20              | 135,20  | 3,159.9                   | -307.1           | 305.0         | 432.8                       | 0.00                        | 0.00                       | 0.00                      |
| 3,300.0                   | 11.20              | 135.20  | 3,258.0                   | -320.9           | 318.7         | 452.3                       | 0.00                        | 0.00                       | 0.00                      |
| •                         |                    |         |                           |                  |               |                             |                             |                            |                           |
| 3,400.0                   | 11.20              | 135.20  | 3,356.1                   | -334.7           | 332.4         | 471.7                       | 0.00                        | 0.00                       | 0.00                      |
| 3,500.0                   | 11.20              | 135.20  | 3,454.2                   | -348.5           | 346.1         | 491.1                       | 0.00                        | 0.00                       | 0.00                      |
| 3,600.0                   | 11.20              | 135.20  | 3,552.3                   | -362.3           | 359.8         | 510.6                       | 0.00                        | 0.00                       | 0.00                      |
| 3,700.0                   | 11.20              | 135.20  | 3,650.4                   | -376.1           | 373.4         | 530.0                       | 0.00                        | 0.00                       | 0.00                      |
| 3,800.0                   | 11.20              | 135.20  | 3,748.5                   | -389.8           | 387.1         | 549.4                       | 0.00                        | 0.00                       | 0.00                      |
| 3,900.0                   | 11.20              | 135.20  | 3,846.6                   | -403.6           | 400.8         | 568.8                       | 0.00                        | 0.00                       | 0.00                      |
| 4,000.0                   | 11.20              | 135.20  | 3,944.7                   | -403.0<br>-417.4 | 414.5         | 588.3                       | 0.00                        |                            |                           |
| 4,100.0                   | 11.20              | 135.20  | 4,042.8                   |                  |               |                             |                             | 0.00                       | 0.00                      |
|                           |                    |         |                           | -431.2           | 428.2         | 607.7                       | 0.00                        | 0.00                       | 0.00                      |
| 4,200.0                   | 11.20              | 135.20  | 4,140.9                   | -445.0           | 441.9         | 627.1                       | 0.00                        | 0.00                       | 0.00                      |
| 4,300.0                   | 11.20              | 135.20  | 4,239.0                   | -458.8           | 455.6         | 646.6                       | 0.00                        | 0.00                       | 0.00                      |
| 4,400.0                   | 11.20              | 135.20  | 4,337.1                   | -472.6           | 469.3         | 666.0                       | 0.00                        | 0.00                       | 0.00                      |
| 4.500.0                   | 11.20              | 135.20  | 4,435.2                   | -486.4           | 483.0         | 685.4                       | 0.00                        | 0.00                       | 0.00                      |
| 4,600.0                   | 11.20              | 135.20  | 4,533.3                   | -500.1           | 496.7         | 704.8                       | 0.00                        | 0.00                       | 0.00                      |
| 4,700.0                   | 11.20              | 135.20  | 4,533.3<br>4,631.4        |                  |               |                             |                             |                            |                           |
|                           |                    |         |                           | -513.9           | 510.3         | 724.3                       | 0.00                        | 0.00                       | 0.00                      |
| 4,800.0                   | 11.20              | 135.20  | 4,729.4                   | -527.7           | 524.0         | 743.7                       | 0.00                        | 0.00                       | 0.00                      |
| 4,900.0                   | 11.20              | 135.20  | 4,827.5                   | -541.5           | 537.7         | 763.1                       | 0.00                        | 0.00                       | 0.00                      |
| 5,000.0                   | 11.20              | 135.20  | 4,925.6                   | -555.3           | 551.4         | 782.6                       | 0.00                        | 0.00                       | 0.00                      |
| 5,100.0                   | 11.20              | 135.20  | 5,023.7                   | -569.1           | 565.1         | 802.0                       | 0.00                        | 0.00                       | 0.00                      |
| 5,200.0                   | 11.20              | 135.20  | 5,121.8                   | -582.9           | 578.8         | 821.4                       | 0.00                        | 0.00                       | 0.00                      |



# PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

**SECTION 23 T8S, R17E** 

Well: R-23-8-17 Wellbore: Wellbore #1 Design: Design #1

Local Co-ordinate Reference:

TVD Reference: **MD Reference:** North Reference:

**Survey Calculation Method:** 

Well R-23-8-17

R-23-8-17 @ 5141.0ft (Original Well Elev) R-23-8-17 @ 5141.0ft (Original Well Elev)

Minimum Curvature

| ned Survey                |                    |         |                           |               |               |                             |                             |                            |                           |
|---------------------------|--------------------|---------|---------------------------|---------------|---------------|-----------------------------|-----------------------------|----------------------------|---------------------------|
| Measured<br>Depth<br>(ft) | Inclination<br>(°) | Azimuth | Vertical<br>Depth<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Vertical<br>Section<br>(ft) | Dogleg<br>Rate<br>(°/100ft) | Build<br>Rate<br>(°/100ft) | Turn<br>Rate<br>(°/100ft) |
| 5,300.0                   | 11.20              | 135.20  | 5,219.9                   | -596.6        | 592.5         | 840.9                       | 0.00                        | 0.00                       | 0.00                      |
| 5,400.0                   | 11.20              | 135.20  | 5,318.0                   | -610.4        | 606.2         | 860.3                       | 0.00                        | 0.00                       | 0.00                      |
| 5,483.6                   | 11.20              | 135.20  | 5,400.0                   | -622.0        | 617.6         | 876.5                       | 0.00                        | 0.00                       | 0.00                      |
| R-23-8-17                 | TGT                |         |                           |               |               |                             |                             |                            |                           |
| 5,500.0                   | 11.20              | 135.20  | 5,416.1                   | -624.2        | 619.9         | 879.7                       | 0.00                        | 0.00                       | 0.00                      |
| 5,600.0                   | 11.20              | 135.20  | 5,514.2                   | -638.0        | 633.6         | 899.1                       | 0.00                        | 0.00                       | 0.00                      |
| 5,700.0                   | 11.20              | 135.20  | 5,612.3                   | -651.8        | 647.3         | 918.6                       | 0.00                        | 0.00                       | 0.00                      |
| 5,800.0                   | 11.20              | 135.20  | 5,710.4                   | -665.6        | 660.9         | 938.0                       | 0.00                        | 0.00                       | 0.00                      |
| 5,900.0                   | 11.20              | 135.20  | 5,808.5                   | -679.4        | 674.6         | 957.4                       | 0.00                        | 0.00                       | 0.00                      |
| 6,000.0                   | 11.20              | 135.20  | 5,906.6                   | -693.1        | 688.3         | 976.9                       | 0.00                        | 0.00                       | 0.00                      |
| 6,100.0                   | 11.20              | 135.20  | 6,004.7                   | -706.9        | 702.0         | 996.3                       | 0.00                        | 0.00                       | 0.00                      |
| 6,200.0                   | 11.20              | 135.20  | 6,102.8                   | -720.7        | 715.7         | 1,015.7                     | 0.00                        | 0.00                       | 0.00                      |
| 6,300.0                   | 11.20              | 135.20  | 6,200.9                   | -734.5        | 729.4         | 1,035.1                     | 0.00                        | 0.00                       | 0.00                      |
| 6,400.0                   | 11.20              | 135.20  | 6,299.0                   | -748.3        | 743.1         | 1,054.6                     | 0.00                        | 0.00                       | 0.00                      |
| 6,500.0                   | 11.20              | 135.20  | 6,397.0                   | -762.1        | 756.8         | 1,074.0                     | 0.00                        | 0.00                       | 0.00                      |
| 6,600.0                   | 11.20              | 135.20  | 6,495.1                   | -775.9        | 770.5         | 1,093.4                     | 0.00                        | 0.00                       | 0.00                      |
| 6,706.9                   | 11.20              | 135.20  | 6,600.0                   | -790.6        | 785.1         | 1,114.2                     | 0.00                        | 0.00                       | 0.00                      |

| Targets                               |                  |                 |             |               |               |                  |                 |                 |                   |
|---------------------------------------|------------------|-----------------|-------------|---------------|---------------|------------------|-----------------|-----------------|-------------------|
| Target Name - hit/miss target - Shape | Dip Angle<br>(°) | Dip Dir.<br>(°) | TVD<br>(ft) | +N/-S<br>(ft) | +E/-W<br>(ft) | Northing<br>(ft) | Easting<br>(ft) | Latitude        | Longitude         |
| R-23-8-17 TGT                         | 0.00             | 0.00            | 5 400 0     | -622.0        | 617.6         | 7 208 774 48     | 2 067 315 56    | 40° 5' 59 833 N | 109° 58' 25 711 W |

<sup>-</sup> plan hits target - Circle (radius 75.0)



Project: USGS Myton SW (UT) Site: SECTION 23 T8S, R17E

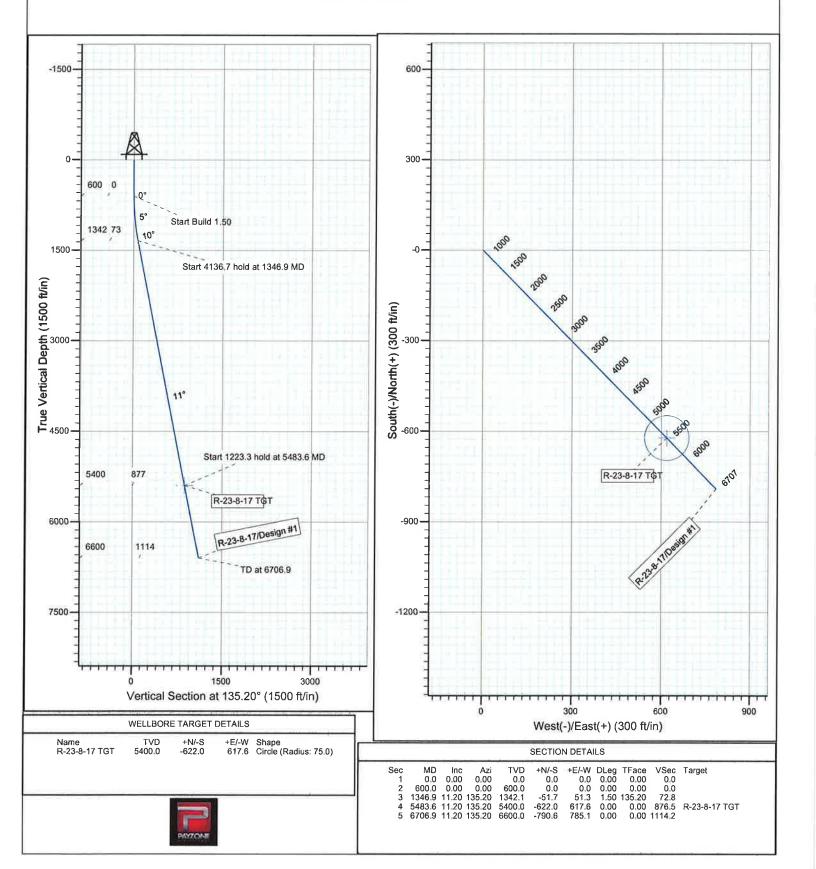
Well: R-23-8-17 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.37°

Magnetic Field Strength: 52385.1snT Dip Angle: 65.88° Date: 2010/10/05 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



# NEWFIELD PRODUCTION COMPANY GREATER MONUMENT BUTTE R-23-8-17 AT SURFACE: NE/SW SECTION 23, T8S, R17E DUCHESNE COUNTY, UTAH

## ONSHORE ORDER NO. 1

## **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

## 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site Greater Monument Butte R-23-8-17 located in the NE 1/4 SW 1/4 Section 23, T8S, R17E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40-1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly -6.8 miles  $\pm$  to it's junction with an existing road to the east; proceed easterly -3.0 miles  $\pm$  to it's junction with an existing road to the northeast; proceed northeasterly -0.3 miles  $\pm$  to it's junction with an existing road to the southeast; proceed in a southeasterly direction -1.4 miles  $\pm$  to the existing 11-23-8-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 11-23-8-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

## 4. <u>LOCATION OF EXISTING AND/OR PROPOSED FACILITIES</u>

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

## 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond

Water Right: 43-11787

Newfield Collector Well

Water Right: 41-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

## 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

## 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

## **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

## 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

## b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

## 11. SURFACE OWNERSHIP - Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #02-63, 6/10/02. Paleontological Resource Survey prepared by, Wade E. Miller, 5/4/02. See attached report cover pages, Exhibit "D".

Newfield Production Company requests 1,260' of buried water line to be granted in Lease UTU-76239.

It is proposed that the disturbed area will be 60' wide to allow for construction of the proposed access road, a 10" or smaller gas gathering line, a 4" poly fuel gas line, a buried 10" steel water injection line, a buried 3" poly water return line, and a and a 14" surface flow line. The planned access road will consist of a 20' permanent running surface (10' either side of the centerline) crowned and ditched in order to handle any run-off from any precipitation events that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be turnouts as needed along this road to allow for increases in potential traffic issues. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Both the proposed surface gas and buried water lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** The proposed water pipelines will be buried in a 4-5' deep trench constructed with a trencher or backhoe for the length of the proposal. The equipment will run on the surface and not be flat bladed to minimize surface impacts to precious topsoil in these High Desert environments. If possible, all proposed surface gas pipelines will be installed on the same side of the road as existing gas lines. The construction phase of the planned access road, proposed gas lines and proposed water lines will last approximately (5) days.

In the event that the proposed well is converted to a water injection well, a Sundry Notice 3160-5 form will be applied for through the Bureau of Land Management field office.

For a ROW plan of development, please refer to the Greater Monument Butte Green River Development SOP and as well as the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Surface Flow Line

Newfield requests 1,277' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "D"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

<u>Clearing and Grading</u>: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

<u>Installation</u>: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

<u>Termination and Final Reclamation:</u> After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation

procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

## **Details of the On-Site Inspection**

The proposed Greater Monument Butte R-23-8-17 was on-sited on 11/9/10. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), Suzanne Grayson (Bureau of Land Management), and Janna Simonsen (Bureau of Land Management). Weather conditions were clear and ground cover was 100% open.

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the Greater Monument Butte R-23-8-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Greater Monument Butte R-23-8-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:

#### Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (435) 646-3721

## Certification

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #R-23-8-17, Section 23, Township 8S, Range 17E: Lease UTU-76239 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

12/8/10

Date

Mandie Crozier

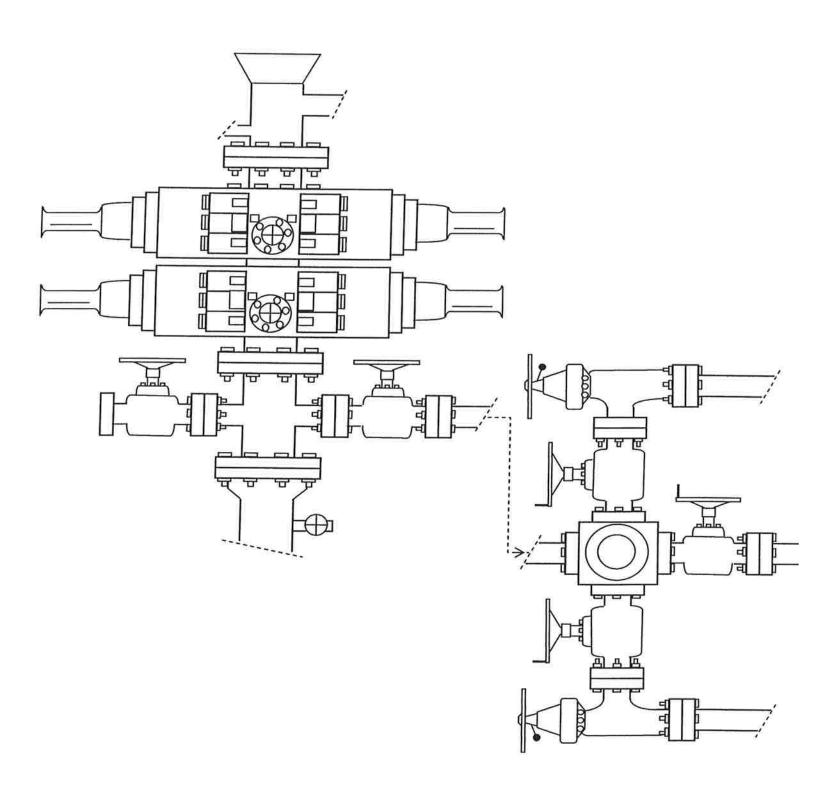
Mandie Crozier

Specialist Regulatory Specialist

Newfield Production Company

# 2-M SYSTEM

Blowout Prevention Equipment Systems



**EXHIBIT C** 

# **United States Department of the Interior**

## **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

December 9, 2010

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2010 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2010 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50528 GMBU M-23-8-17 Sec 23 T08S R17E 1995 FSL 1996 FWL BHL Sec 23 T08S R17E 2236 FNL 2273 FEL

43-013-50529 GMBU R-23-8-17 Sec 23 T08S R17E 1975 FSL 1991 FWL

BHL Sec 23 T08S R17E 1164 FSL 2506 FEL

43-013-50530 GMBU N-23-8-17 Sec 23 T08S R17E 1874 FSL 0723 FWL BHL Sec 23 T08S R17E 2606 FNL 1374 FWL

43-013-50531 GMBU Q-23-8-17 Sec 23 T08S R17E 1863 FSL 0704 FWL BHL Sec 23 T08S R17E 1014 FSL 1464 FWL

43-047-51399 GMBU H-24-8-17 Sec 24 T08S R17E 1217 FNL 1933 FWL

BHL Sec 24 T08S R17E 0260 FNL 2541 FEL

43-047-51400 GMBU M-24-8-17 Sec 24 T08S R17E 1226 FNL 1912 FWL

BHL Sec 24 T08S R17E 2497 FSL 2363 FEL

43-047-51401 GMBU B-25-8-17 Sec 24 T08S R17E 0643 FSL 0674 FEL BHL Sec 25 T08S R17E 0334 FNL 1483 FEL

43-013-50532 GMBU Q-30-8-17 Sec 30 T08S R17E 1978 FSL 1911 FWL

BHL Sec 30 T08S R17E 1245 FSL 1200 FWL

Page 2

| API#         | WELL NAME            | L    | OCATIO | ١            |      |      |
|--------------|----------------------|------|--------|--------------|------|------|
| (Proposed PZ | GREEN RIVER)         |      |        |              |      |      |
| 43-013-50533 | GMBU R-30-8-17<br>BH |      |        | R17E<br>R17E | _    |      |
| 43-013-50534 | GMBU I-1-9-16<br>BH  |      |        | R16E<br>R16E |      |      |
| 43-013-50535 | GMBU K-1-9-16<br>BH  |      |        | R17E<br>R16E |      |      |
| 43-013-50536 | GMBU L-1-9-16<br>BH  |      |        | R16E<br>R16E |      |      |
| 43-013-50537 | GMBU S-1-9-16<br>BH  |      |        | R16E<br>R16E | _    |      |
| 43-013-50538 | GMBU S-10-9-16<br>BH |      |        | R16E<br>R16E | _    |      |
| 43-013-50539 | GMBU R-10-9-16<br>BH | <br> |        | R16E<br>R16E | <br> | <br> |
| 43-013-50540 | GMBU C-15-9-16<br>BH |      |        | R16E<br>R16E | _    |      |

This office has no objection to permitting the wells at this time.

# Michael L. Coulthard

Digitally signed by Michael L. Coulthard
DN: cn=Michael L. Coulthard, o=Bureau of Land Management, ou=Branch of Minerals,
email=Michael\_Coulthard@blm.gov, c=US
Date: 2010.12.09 11:11:06-07:00'

bcc: File - Greater Monument Butte Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:12-9-10



#### VIA ELECTRONIC DELIVERY

December 10, 2010

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801

Salt Lake City, UT 84114-5801

RE: Directional Drilling

**Greater Monument Butte R-23-8-17**Greater Monument Butte (Green River) Unit

Surface Hole:

T8S-R17E Section 23: NESW (UTU-76239)

1975' FSL 1991' FWL

At Target:

T8S-R17E Section 23: SWSE (UTU-76239)

1164' FSL 2506' FEL

Duchesne County, Utah

Dear Ms. Mason;

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 12/8/10, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

Sincerely,

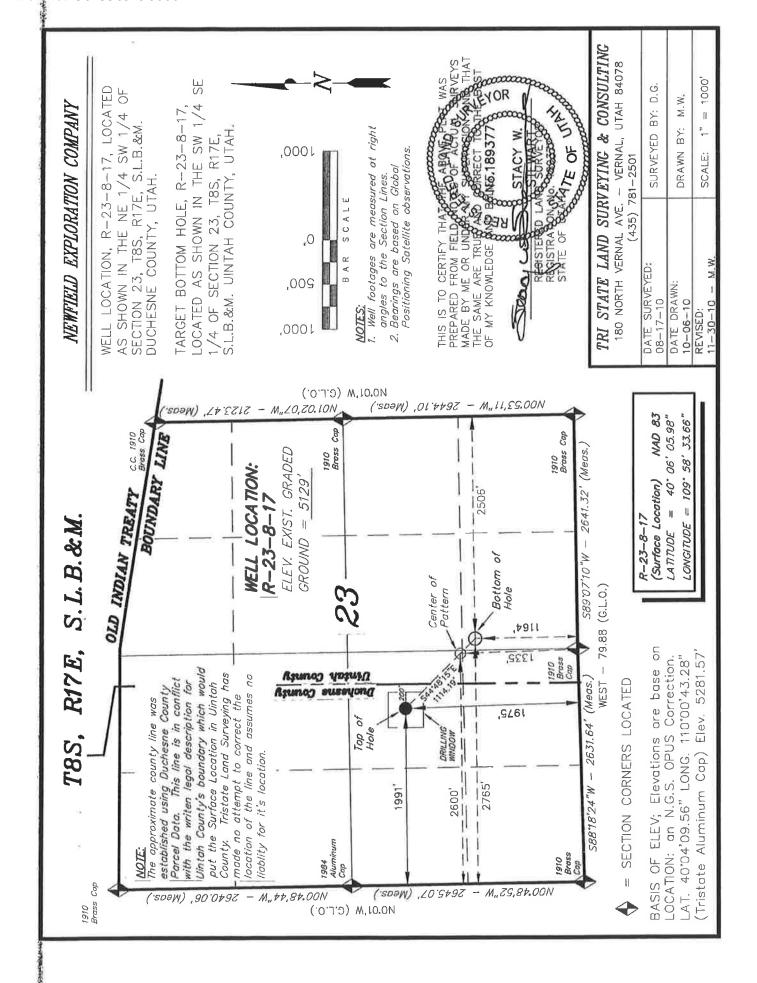
**Newfield Production Company** 

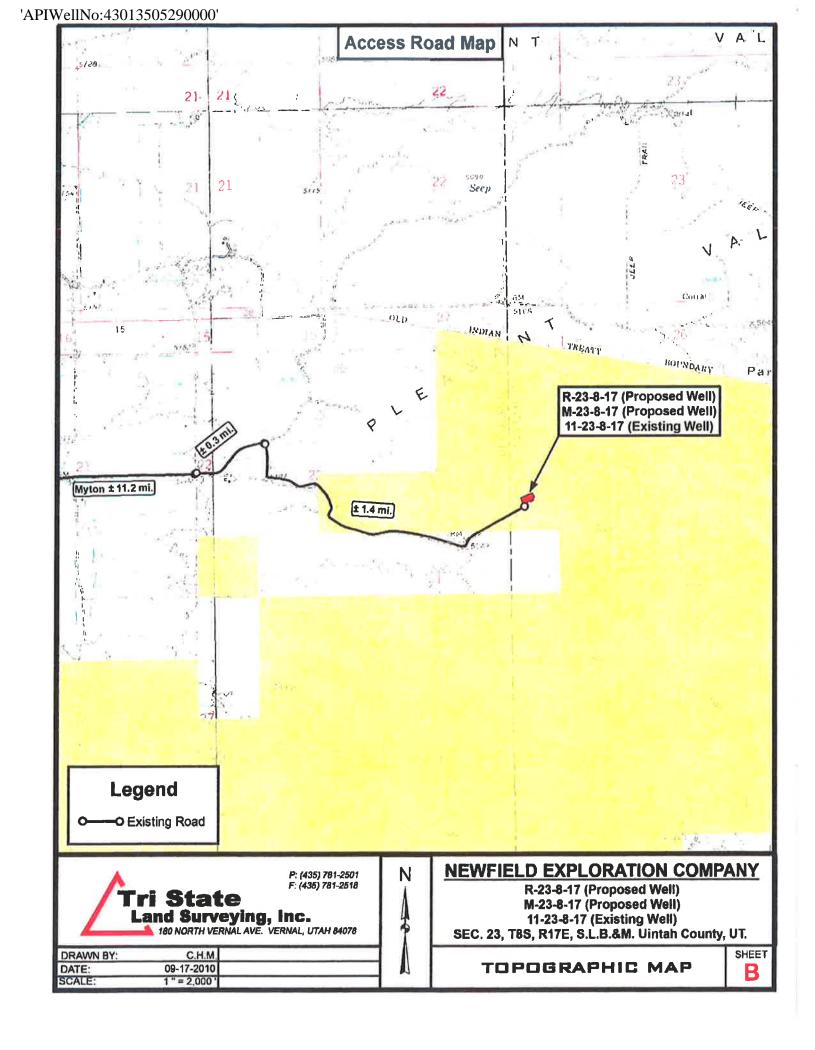
Shane Gillespie Land Associate

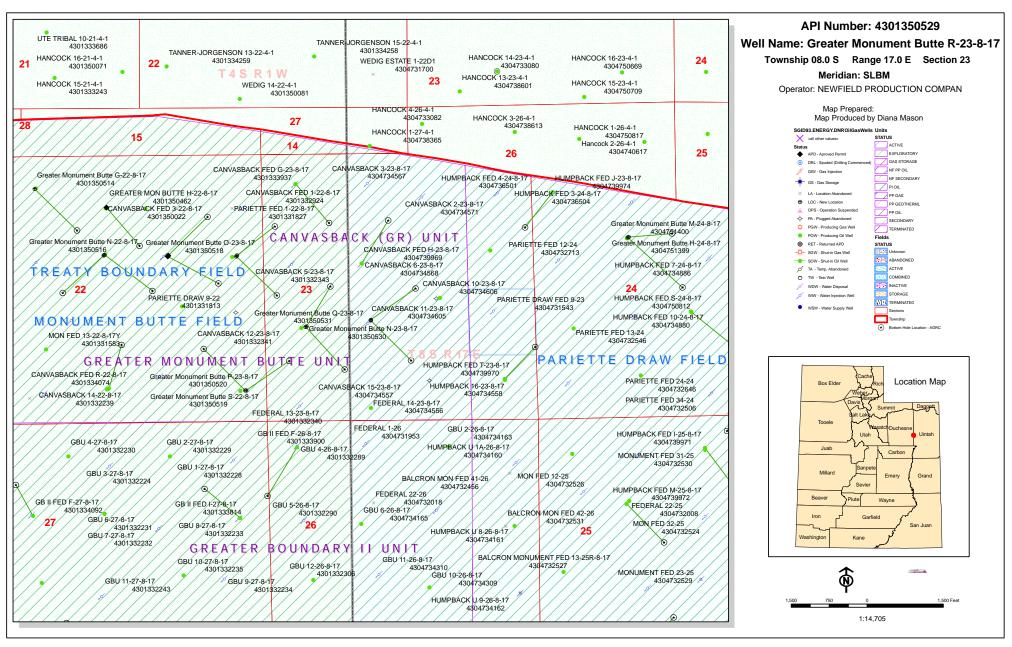
(Continued on page 2)

FORM APPROVED Form 3160 - 3 OMB No. 1004-0137 Expires July 31, 2010 (August 2007) UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR UTU-76239 BUREAU OF LAND MANAGEMENT 6. If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No. **V** DRILL REENTER la. Type of work: Greater Monument Butte 8. Lease Name and Well No. Oil Well Gas Well ✓ Single Zone Multiple Zone Greater Monument Butte R-23-8-17 lb. Type of Well: Name of Operator 9. API Well No. Newfield Production Company 10. Field and Pool, or Exploratory 3b. Phone No. (include area code) 3a. Address Route #3 Box 3630, Myton UT 84052 (435) 646-3721 Monument Butte 11. Sec., T. R. M. or Blk, and Survey or Area 4. Location of Well (Report location clearly and in accordance with any State requirements.\*) Sec. 23, T8S R17E NE/SW 1975' FSL 1991' FWL Sec. 23, T8S R17E (UTU-76239) At proposed prod. zone SW/SE 1164' FSL 2506' FEL Sec. 23, T8S R17E (UTU-76239) 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office\* UT Duchesne Approximately 12.9 miles southeast of Myton, UT 15. Distance from proposed\* 17 Spacing Unit dedicated to this well 16. No. of acres in lease location to nearest property or lease line, ft. Approx. 164' f/lse, NA' f/unit (Also to nearest drig. unit line, if any) 473.84 20 Acres 20. BLM/BIA Bond No. on file 18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. 19. Proposed Depth WYB000493 6,707 Approx. 756' Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 5129' GL (7) days from SPUD to rig release 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 4. Bond to cover the operations unless covered by an existing bond on file (see 1. Well plat certified by a registered surveyor. Item 20 above). 2. A Drilling Plan. 5. Operator certification 3. A Surface Use Plan (if the location is on National Forest System Lands, the Such other site specific information and/or plans as may be required by the SUPO must be filed with the appropriate Forest Service Office). Name (Printed Typed) 25. Signatury Mandie Crozier Title Regulatory Specialist Date Approved by (Signature) Name (Printed Typed) Title Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on page 2)







## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 12/8/2010 **API NO. ASSIGNED:** 43013505290000 WELL NAME: Greater Monument Butte R-23-8-17 **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825 **CONTACT:** Mandie Crozier PROPOSED LOCATION: NESW 23 080S 170E **Permit Tech Review: SURFACE: 1975 FSL 1991 FWL Engineering Review: BOTTOM:** 1164 FSL 2506 FEL Geology Review: **COUNTY: DUCHESNE LATITUDE: 40.10160 LONGITUDE:** -109.97529 UTM SURF EASTINGS: 587343.00 **NORTHINGS:** 4439327.00 FIELD NAME: MONUMENT BUTTE LEASE TYPE: 1 - Federal **LEASE NUMBER: UTU-76239** PROPOSED PRODUCING FORMATION(S): GREEN RIVER SURFACE OWNER: 1 - Federal **COALBED METHANE: NO RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** ✓ PLAT R649-2-3. Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493 **Potash** R649-3-2. General Oil Shale 190-5 **Oil Shale 190-3** R649-3-3. Exception Oil Shale 190-13 **Drilling Unit** Board Cause No: Cause 213-11 Water Permit: 437478 **Effective Date:** 11/30/2009 **RDCC Review:** Siting: Suspends General Siting **Fee Surface Agreement Intent to Commingle** ✓ R649-3-11. Directional Drill **Commingling Approved** 

Comments:

Presite Completed
IRR SEC:SURF LOC IN DUCHESNE BHL IN UINTAH:

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason 27 - Other - bhill

API Well No: 43013505290000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## **Permit To Drill**

\*\*\*\*\*

Well Name: Greater Monument Butte R-23-8-17

**API Well Number:** 43013505290000 **Lease Number:** UTU-76239

**Surface Owner:** FEDERAL **Approval Date:** 12/14/2010

#### **Issued to:**

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

## **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

## **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

## **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

API Well No: 43013505290000

## **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas From: "Mandie Crozier" <mcrozier@newfield.com>
To: "Diana Mason" <dianawhitney@utah.gov>
CC: "Mandie Crozier" <mcrozier@newfield.com>

**Date:** 3/14/2011 2:46 PM

**Subject:** FW: M-23-8-17 AND R-23-8-17

I went ahead and resubmitted these two APD's with the correct County (Uintah). They need to replace what was originally submitted.

Mandie Crozier Newfield Production (435) 646-4825

>\_\_\_\_\_

> From: Mandie Crozier

> Sent: Monday, March 14, 2011 1:23 PM

> To: 'Diana Mason'

> Subject: M-23-8-17 AND R-23-8-17

>

> Hey Diana,

- > I have a huge problem with these two APD's that the BLM brought to my
- > attention. The original host well was permitted and approved as being
- > in Uintah County. I should have checked that before I submitted
- > these, but I assumed the survey company had it right, but they didn't.
- > The plats for these two infill 20 acre wells that are being proposed
- > off of that well pad show the surface as being in Duchesne County,
- > with a note on the plat that there is a discrepancy with the county
- > line.
- > In talking with the BLM we decided that it would be best to remain
- > consistant and have the 20 acre wells show as being in Uintah County
- > as well.

>

- > The problem is, they have already been approved by you guys and
- > assigned a Duchesne County API number. How should be go about
- > handling these so I can get them resubmitted with the proper county
- > and the corrected plat pages?

>

- > Greater Monument Butte M-23-8-17: 43-013-50528
- > Greater Monument Butte R-23-8-17: 43-013-50529

>

- > Mandie Crozier
- > Newfield Production
- > (435) 646-4825

>